# IN THE UNITED STATES DISTRICT COURT FOR THE WESTERN DISTRICT OF MISSOURI WESTERN DIVISION

JOHN CARLISLE,	)
Plaintiff,	)
VS.	) Case No. 05-0995-CV-W-ODS
HITACHI KOKI U.S.A. LTD; HITACHI HOKI CO., LTD; and HOME DEPOT U.S.A., INC.,	) ) )
Defendants.	)

ORDER AND OPINION (1) GRANTING PLAINTIFF'S MOTION TO EXCLUDE TESTIMONY OF DEFENDANTS' POLITICAL SCIENTIST, (2) DENYING DEFENDANTS' MOTION TO TO EXCLUDE EXPERT TESTIMONY OF MARK EZRA, AND (3) DENYING PLAINTIFF'S MOTION TO EXCLUDE TESTIMONY OF DEFENDANT' BIOMECHANICAL EXPERT

Pending are three separate motions to strike experts. For the following reasons, (1) Plaintiff's Motion to Exclude Testimony of Defendants' Political Scientist (Doc. # 98) is granted, (2) Defendants' Motion to Exclude Expert Testimony of Mark Ezra (Doc. # 105) is denied, and (3) Plaintiff's Motion to Exclude Testimony of Defendants' Biomechanical Expert (Doc. # 100) is denied.

## I. BACKGROUND

Plaintiff was injured while operating a pneumatic nail gun utilizing a contact trip mechanism. This mechanism allows a nail to be fired when the "nose" of the gun is in contact with a surface and the trigger is pulled, regardless of the order in which those events occur. Plaintiff alleges the nail gun's failure to use a sequential trip mechanism – which allows a nail to be fired only if the trigger is pulled after the gun's nose contacts a surface – instead of a contact trip mechanism constituted a design flaw.

#### II. DISCUSSION

The use of expert testimony is governed by Rule 702 of the Federal Rules of Evidence. This rule permits the use of specialized knowledge if it will "assist the trier of fact to understand the evidence or to determine a fact in issue," but only if "(1) the testimony is based upon sufficient facts or data, (2) the testimony is the product of reliable principles and methods, and (3) the witness has applied the principles and methods reliably to the facts of the case." Rule 702 was promulgated following the Supreme Court's decisions in *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993) and Kumho Tire Co. v. Carmichael, 526 U.S. 137 (1999), which established the district court's role as a "gatekeeper" to insure that expert testimony is relevant, reliable, and helpful to the trier of fact. Case law establishes a list of factors that, depending upon the facts of the case and the field of expertise at issue, may be helpful in conducting this inquiry. However, there is no universal list of factors or requirements; the inquiry depends upon the nature and circumstances of the case at hand. Kumho, 526 U.S. at 150-51. Thus, for instance, an opinion may not have been subjected to peer review because there is no interest in the opinion beyond the parties to the case. <u>Id</u>. at 151. This is particularly true (as in this case) when the question is how a particular incident occurred (as compared to Daubert, which involved the alleged deleterious side effects of medication). In such a situation, the underlying methodology must be appropriate, but the ultimate conclusion is not likely to have been subjected to peer review because of the limited general interest in the matter.<sup>1</sup>

The Court of Appeals has also cautioned that district courts should not purport to resolve which expert's opinion is "better" or confuse matters of impeachment with matters of admissibility. For instance, "the factual basis of an expert opinion goes to the credibility of the testimony, and not the admissibility, and it is up to the opposing party to examine the factual basis for the opinion in cross-examination. . . . [O]nly if an expert's

<sup>&</sup>lt;sup>1</sup>This is why the Court has not discussed the issue of peer review further, even though the parties spend much time on the topic.

opinion is so fundamentally unsupported that it can offer no assistance to the jury must such testimony be excluded." <u>Larson v. Kempker</u>, 414 F.3d 936, 941 (8<sup>th</sup> Cir. 2005) (quotations omitted).

## A. Stephen McGonegal

Plaintiff contends Defendants' political scientist – Stephen McGonegal – should not be allowed to testify. The Court disagrees with Plaintiff on many points, but agrees his testimony is irrelevant.

McGonegal has analyzed data compiled by the United States Bureau of Labor Statistics ("BLS") and compared the number and frequency of injuries caused by nailers – both electric and pneumatic – to the number and frequency of injuries caused by other tools and devices. He has developed opinions based on those statistical comparisons. The Court rejects Plaintiff's arguments regarding McGonegal's qualifications or the soundness and basis for his conclusions. In other words, McGonegal would be permitted to present his opinions to the jury if they were relevant to the case or otherwise helpful to the jury. The Court, however, concludes his opinions are not relevant or helpful.

Plaintiff does not simply contend he was injured by a nailer. He contends he was injured by a specific type of nailer; namely, one possessing a contact trip mechanism. McGonegal does not purport to have an opinion about nailers with contact trip mechanisms; he has an opinion about a larger category of devices that includes nailers with contact trip mechanisms, but this opinion about the larger category will not provide any helpful or relevant information about the device that actually caused Plaintiff's injury. It may be that the statistical conclusions are dominated or skewed by the prevalence of nailers with sequential trip mechanisms.<sup>2</sup> In that case, McGonegal will actually prove Plaintiff's point in demonstrating the sequential trip mechanisms are

<sup>&</sup>lt;sup>2</sup>McGonegal analyzed statistics for 2001. There is no indication as to whether contact trip mechanisms form the majority or the minority of nailers in circulation at that time.

safer. Ultimately, McGonegal cannot clarify this matter because the data upon which he relies does not distinguish between the two mechanisms. The information McGonegal can provide the jury is not relevant to the issues at hand, will not help the jury decide whether a nailer using a contact trip mechanism is unreasonably dangerous, and risks misleading the jury by providing information that discloses nothing about the device Plaintiff was actually using.<sup>3</sup>

### B. Mark Ezra

Ezra is an engineer with over thirty-two years of experience. He has been involved in the investigation of approximately thirty nailer accidents since September 2004, all of which involved the unintended firing of a nail or other fastener into a human's body. Between June 1996 and August 2004, Ezra reviewed other engineers' reports in over sixty-three nailer accidents.

In this case, Ezra reviewed depositions, medical reports and user manuals for the nailer Plaintiff was using. He also performed tests with the actual nailer Plaintiff was using when he was injured, including a pendulum test (which is designed to calculate the force and velocity of the nailer's kickback or recoil). Ezra also performed tests to determine whether Plaintiff's injuries could have been caused by a nail ricocheting off a surface (as opposed to being shot directly from the nailer into his face). Ezra concluded Plaintiff was injured when the nailer "recoiled, rotated and the nose piece or contact trip piece came into contact with his face. This contact resulted in the unintended ejection of a nail." This sequence of events occurred too rapidly for Plaintiff to realize what was happening, so he was unable to release the trigger. Ezra further concluded a sequential trip mechanism would not have resulted in a nail being fired under these circumstances, the technology for such a mechanism had existed for many years before the nailer's manufacture, and the use of such a mechanism has minimal effect on productivity. Ezra Report at 13.

<sup>&</sup>lt;sup>3</sup>Arguably, this is as much a simple issue of relevance as it is a <u>Daubert</u> issue.

Defendant contends Ezra did not sufficiently test his theories because he did not test "how much . . . rotation" would occur, confirm the existence of rotation, or consider a variety of measurements and other considerations. Defendant also faults Ezra for lacking a background in biomechanics, leaving him unable to confirm the accident occurred in the manner described. Finally, Defendant contends Ezra failed to consider alternative causes of the accident.

Most of these issues are simply not important. For instance, Defendant describes several measurements Ezra did not make, but never explains why any of them are important. Defendant properly notes the pendulum test did not reveal the possibility of rotation – but then, it is not designed to do so. The pendulum test is designed to calculate the force and velocity of the recoil; this data is then used in other calculations. Ezra also explained there are too many variables involved with the individual using the nailer to accurately determine what effect that person will have in affecting the numbers, but physics and engineering principles can generally explain how the various forces combine and what the likely outcome will be. Finally, Ezra considered and tested for the possibility Plaintiff's injuries were caused by a ricochet, and Defendant suggests no other alternatives that should have been considered.<sup>4</sup>

Defendant next faults Ezra's cost/benefit analysis comparing contact and sequential mechanisms. Ezra's math is quite elementary, and is based simply on the speed with which the two types of nailers can fire a certain number of nailers. It does not take into account human fatigue, but his calculations about the relative speed of the two mechanisms is admissible.

In short, Defendants' objections may affect the credibility of Ezra's opinions, but do nothing to deprive it of the factual basis supporting them. Biomechanics and physics/engineering may analyze the same events in different ways, and different

<sup>&</sup>lt;sup>4</sup>This factor probably does not have a role in this case. "Courts often cite this factor when addressing an expert on causation arrived through a differential diagnosis." <u>Lauzon v. Senco Products, Inc.</u>, 270 F.3d 681, 693 n.7 (8<sup>th</sup> Cir. 2001). Differential diagnosis involves a literal process of elimination in order to determine a cause, and was not employed by the experts discussed in this Order.

factors may be relevant to those fields: this does not mean an opinion rendered under either discipline is unreliable or (more importantly) inadmissible. Defendant has not demonstrated Ezra failed to utilize the methods and procedures recognized in his area of expertise, so the Court cannot rule, as a matter of law, that his opinion lacks a sufficient basis for presentation to the jury.

## C. Erick Knox

Dr. Knox holds degrees (including a Ph.D) in biomedical engineering, and Plaintiff does not contest his expertise in this field. Instead, he complains Dr. Knox (1) failed to demonstrate utilization of scientific methodology, (2) his theory was not published or peer reviewed, (3) the rate of error of his methodology is unknown and (4) his theory has not gained general acceptance in the relevant scientific community. Plaintiff also alleges the probative value of Knox's opinions is outweighed by the risk of unfair prejudice.

Many of Plaintiff's arguments are similar to those raised previously by Defendants (and rejected by the Court). For instance, Plaintiff concedes Dr. Knox is well-qualified in his field, and Dr. Knox asserts that his methods and analysis are consistent with those used in his field – yet Plaintiff asks the Court to hold otherwise, without offering any basis for doing so. Plaintiff does not provide the testimony of another expert in the field to demonstrate Dr. Knox has failed to abide by the standards and methods of his field, leaving the Court no firm basis for rejecting his testimony.

Like Plaintiff's expert, Dr. Knox reviewed medical reports, depositions, photographs and reports in formulating his opinion. In addition, to help test Plaintiff's theory, Dr. Knox affixed the same model of nailer he was using to an anthropometric "dummy" to simulate a human's use of the tool. "Various postures were tested which were considered reasonable for conducting this task. The joints of the wrist, elbow, and shoulder of the [dummy] were loosened such that the segments would rotate freely. This simulates, as closely as possible, an arm with little or no muscular co-contraction." Knox Report at 6. Essentially, Dr. Knox tested the recoil effect with zero influence from

the user's muscles to determine whether the force of the recoil, the manner of usage and the body's joints would allow the accident to occur in the manner posited by Plaintiff. By simulating a body with no muscular resistance to the nailer's recoil, the dummy undeniably is not similar to Plaintiff; however, Dr. Knox opined this inured to Plaintiff's benefit as any muscular resistance would further impede the nailer's ability to recoil, rotate, and contact Plaintiff's face.

Plaintiff's objections – like those interposed by Defendants – affect the weight but not the admissibility of the expert's opinion. Plaintiff identifies several factors he believes undercut Dr. Knox's conclusions, and Plaintiff is free to raise those issues on cross-examination. However, as stated earlier, "the factual basis of an expert opinion goes to the credibility of the testimony, and not the admissibility, and it is up to the opposing party to examine the factual basis for the opinion in cross-examination. . . . [O]nly if an expert's opinion is so fundamentally unsupported that it can offer no assistance to the jury must such testimony be excluded." Larson, 414 F.3d at 941 (quotations omitted). Just as the engineer's opinion is admissible despite its differences with biomechanics, the biomedical expert's opinion is admissible despite its differences with engineering principles. The jury will decide which of these experts to credit.

#### III. CONCLUSION

For these reasons, (1) Plaintiff's Motion to Exclude Testimony of Defendants' Political Scientist is granted, (2) Defendants' Motion to Exclude Expert Testimony of Mark Ezra is denied, and (3) Plaintiff's Motion to Exclude Testimony of Defendants' Biomechanical Expert is denied.

IT IS SO ORDERED.

DATE: April 10, 2007

/s/ Ortrie D. Smith
ORTRIE D. SMITH, JUDGE
UNITED STATES DISTRICT COURT